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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/897,896	07/05/2001	Sara Bern	2789-41	4353

7590 07/19/2004	EXAMINER
NIXON & VANDERHYE P.C.	AGDEPPA, HECTOR A

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Arlington, VA 22201-4714

ART UNIT	PAPER NUMBER
2642	

DATE MAILED: 07/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>05 July 2001 and 23 August 2001</u>.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-34</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-34</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>05 July 2001</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date <u>2,3</u>.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Specification

1.   This application does not contain an abstract of the disclosure as required by 37

CFR 1.72(b). An abstract on a separate sheet is required.

2.   No section headings as specified below, appear in the application for the present
invention.
        Appropriate correction is required.

        The following guidelines illustrate the preferred layout for the specification of a
utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

        As provided in 37 CFR 1.77(b), the specification of a utility application should
include the following sections in order. Each of the lettered items should appear in
upper case, without underlining or bold type, as a section heading.

          (a) TITLE OF THE INVENTION.
          (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
          (c) BACKGROUND OF THE INVENTION.
                  (1) Field of the Invention.
                  (2) Description of Related Art including information disclosed under 37
                  CFR 1.97 and 1.98.
          (d) BRIEF SUMMARY OF THE INVENTION.
          (e) BRIEF DESCRIPTION OF THE DRAWING(S).
          (f) DETAILED DESCRIPTION OF THE INVENTION.
          (g) CLAIM OR CLAIMS (commencing on a separate sheet).
          (h) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

Claim Rejections - 35 USC § 102

        The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3.   Claims 1 – 8, 11, and 22 - 26 are rejected under 35 U.S.C. 102(e) as being

anticipated by US 6,498,843 (Cox).

As to claims 1 and 26, Cox teaches a system and method intercepting and

monitoring signals in a network wherein the system comprises a plurality of switching

nodes 110a – 110c, the switching nodes having routing means for routing calls

throughout communications network 100. (Fig. 1, Col. 4, lines 12 – 31, Col. 4, line 36 –

Col. 5, line 14)

Cox further teaches some manner of service provision means for providing

predetermined services that are located/included in the above-mentioned switching

nodes as well as in a signaling transfer node 150 (Fig. 1) because these nodes

interwork and interconnect to provide services such as initiating, routing, and receiving

telephony calls, as well as controlling fax machines, computers, etc. (Col. 4, line 57 –

Col. 5, line 5) Inherently of course, initiating, receiving, and routing calls or data means

that a user of any of the above-mentioned services requests that service.

Finally, Cox teaches including user information in an initial address message

(IAM) message, for example. IAM messages are the common and standard way of

setting up any call or communication in an advanced intelligent network (AIN).

Moreover, such added information may be a user's target telephone number or some

other item of information such as a virtual private network number, a credit card

number, a personal identification number (PIN), a prepaid calling card number, or even a third party billing number. (Col. 2, lines 7 – 16, Col. 7, line 51 – Col. 8, line 28)

While it is not specifically discussed in Cox, which element or means adds the above-mentioned user information to the IAM, it is noted that SSP 250 (Fig. 2) sends the IAM message to STP, wherein SSP 250 is a part of one of the above-mentioned switching nodes. (Col. 5, lines 24 – 29, Col. 7, lines 46 – 50, Col. 8, lines 14 - 28)

As to claims 2 - 5, Cox further teaches that when a signal associated with a user's target telephone number or some other item of information such as a virtual private network number, a credit card number, a personal identification number (PIN), a prepaid calling card number, or even a third party billing number, is detected, means in the switching node will intercept the call. This information is read as the claimed predetermined trigger information inasmuch as it is a signal associated with this information that triggers call interception. (Col. 2, lines 7 – 16, Col. 4, lines 1 – 35, Col. 6, lines 22 – 37, Col. 8, lines 14 – 46)

Note that the target telephone number or other information may be associated with a calling/call initiating party. (Col. 11, lines 17 – 28)

Note also, that as discussed above, it may be any of the switching nodes that detect the trigger information.

Finally, as discussed above, switching node also comprises routing means and that operation of the system of Cox involves intercepting a call and rerouting the call so that the call may be monitored. (Col. 5, lines 24 – 38, Col. 8, lines 29 – 50)

As to claim 6, Cox teaches that the intercepting means in the switching nodes, as well as the signal transfer nodes, have tables and memory associated therewith for storing trigger information, tags, etc. Moreover, Cox teaches that these tables and trigger information may be added/changed/updated by an operator; therefore, meaning some management means is inherent. Cox also teaches a table access facility 212 (Fig., 2) which may be read as the claimed interception management means. (Col. 5, lines 31 – 60, Col. 6, lines 14 – 21, Col. 6, line 57 – Col. 7, line 12)

As to claim 7, Cox teaches that the once a call signal is detected, information therefrom is sent to the call interception means via the use of triggers and tags so as to activate the interception function and to determine how to further process the call. (Col. 7, line 39 – Col. 8, line 58)

As to claim 8, Cox teaches that upon intercepting a call, the call signaling is duplicated so that it may be routed both to a monitoring agency such as law enforcement personnel, while allowing the call to continue to its original terminating destination, thereby reading on the claimed 3-way conference call. (Col. 2, lines 55 – 62, Col. 4, lines 19 – 35, Col. 8, line 47 – Col. 9, line 4, Col. 11, lines 17 – 47)

As to claim 11, such is inherent in the system of Cox or any AIN system. As discussed above, Cox teaches being able to handle calling card calls. If a user invokes a calling card service to connect for example, a long distance call, the service provisioning means must known that the call is of this type or else, there would be no way to properly and correctly bill or process the call. If the service is third party billing number, as discussed above as well, this information identifying the user and service

must be included in the identification information so that the switching nodes and

signaling transfer nodes knows how to process the call.

Furthermore, Cox teaches the use of call treatment tags that are used and added

to messages such as the above-mentioned IAM messages, as well as other call type

identifying information, and recognizing when specialized call treatment is requested.

(Fig. 6, Col. 5, lines 39 – 54, Col. 7, line 51 – Col. 8, line 28)

As to claims 22 and 23, Cox teaches using the signaling system 7 (SS7) protocol

as well as other transmission protocols. (Col. 5, lines 6 – 14, Col. 6, lines 51 – 56 of

Cox) Messages such as the IAM messages, as well as other messages that are

standard in SS7 must inherently have predetermined fields and data types. This is how

such protocols, whether in telephony or data communications, work. Because as

discussed above, the system of Cox is able to insert various tags and action fields into

an IAM message, for example, without disrupting the basic operation and function of an

IAM message, it is inherent that some fields are not used. Furthermore, inserting and

appending telecommunications and data communications messages/packets with

information is old and well known and protocols intentionally leave open fields or space

in such messages/packets for this very reason, i.e., to allow some specific manipulation

by whomever is using the protocol.

Also, it is common practice to allow manipulation of certain data fields, again, as

long as the basic operation and functionality of a message/packet is not disrupted. Cox

teaches that data fields such as those that store the date and time of a call must

constantly be manipulated for each call inasmuch as each call will have different date

and time values. (Col. 7, lines 51 – 59 of Cox) Also, IAM messages have flag fields as

taught by Cox. (Col. 8, lines 25 – 28 of Cox) These flag fields can have different tags

inserted therein at different points during a call, suggesting another type of data

manipulation wherein data that is already in a field is altered or replaced. Cox teaches

that during a call, the IAM message from switching node 110a to node 110b will have a

call treatment tag 22 inserted therein, whereas the same call, when going from

switching node 110b to STP 150, tag 23 is inserted in the flag field.(Col. 7, lines 60 –

67, Col. 8, lines 29 – 42 of Cox)

As to claims 24 and 25, see the rejection of claims 22 and 23. Note that the

above-mentioned inserted tags are used, for example, by STP 150 to access its own

trigger table to effect the desired call processing for the call. Because the trigger tables

have key field and action fields which contain, for example, the target telephone

number, of calling card number, credit card account, etc, as discussed above, and it is

the tags that are used to find the associated trigger table information, it is inherent that

the user identification information is sent in the fields discussed above in claims 22 and

23.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4.   Claims 9, 10, 12 – 21, and 27 - 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,498,843 (Cox) in view of US 6,370,241 (Clark).

As to claim 9, see the rejection of claim1 regarding SSPs, which would inherently employ a service switching means.

Also, signaling transfer node/point 150 (Fig. 1) reads, in one interpretation on the claimed service control means in that the switching nodes, upon detecting the trigger information, as discussed above, will suspend the call, and communicate with the signaling transfer node so as to get the information needed/instructions needed to process the call. Such processing involves using the trigger information to associate the call with tags/keys in the signaling transfer node's trigger table and therefore glean the proper call handling instructions. (Col. 7, line 51 – Col. 8, line 45 of Cox)

What Cox does not teach is the service control means sending the user information to the service switching means.

However, such operation is merely a description of the standard operation of any

AIN system wherein a service control point (with service control means/functionality) is

used as a database containing user information and call processing instructions. Such

is described with regard to calling card services in Clark, wherein a calling card call is

suspended by a service switching point or service switch 22 (Fig. 1 of Clark) and after

the switch has interacted with a service control point 30 (Fig. 1 of Clark), the service

control point sends instructions and data such as user identification/account information

back to the service switch to allow call processing to continue. (Col. 3, line 47 – Col. 4,

line 58 of Clark)

It would have been obvious for one of ordinary skill in the art at the time the

invention was made to have combined the above functionality of Cox with the

functionality of Clark inasmuch as such would likely be inherent or at the least obvious

because in any AIN system, calls relating to specific services and users (such as calling

card services) must be identified and associated with a user and an account to allow

continued call processing. This is the premise of AIN communications. Moreover, while

Cox implements some service control functionality in a signaling transfer point, it is also

old and very well known in the AIN arts to move functionality around from element to

element based on design preferences relating to speed of operation, redundancy of

database information, speed of database access, etc. Again, as mentioned above, Cox

does not specifically mention where the user identification information comes from, but

regardless it must come from one of the AIN system elements.

As to claim 10, see the rejection of claims 6 and 9.

As to claim 12, neither Cox nor Clark teach user updating of account information, but such a limitation is inherent or at the least obvious to one of ordinary skill in the art at the time the invention was made. Such a limitation merely relates to user management of their account. As discussed above, Cox and Clark contemplate calling card, credit card, and third party billing calls. Somehow, user information/data must be put into the system and must allow for updating. See Col. 6, lines 28 – 32 of Cox wherein it is taught that somehow, user information can be changed. Whether this is by an operator or the user is old and well known. For example, in calling card systems as well as voice mail systems, it is common practice to allow a user to implement their own PIN number and be allowed to change it. This only has to do with user-friendliness of the service.

As to claim 13, see the rejection of claims 1 – 5, 7, and 12.

As to claims 14 and 15, see the rejection of claim 12. Again, what neither Cox nor Clark teach is accessing user data via a computer over the Internet. However, it is again, very old and well known to access and modify user account information or preferences using the Internet. It would have been obvious for one of ordinary skill in the art at the time the invention was made to have allowed for such functionality inasmuch as this method of accessing and modifying information is merely one of a plurality of methods already known and used in the telephony arts for such a purpose. While Cox and Clark do not address this limitation, this is simply because the references focus on the call handling aspect of their inventions. Such limitations

regarding account modification are only user-friendly features that do not affect the call processing and interception aspects of their respective systems.

As to claim 16, such a limitation only relates to how invasive a monitoring agency can be and such would be obvious to one of ordinary skill in the art at the time the invention was made inasmuch as it merely relates to how much access of user data is allowed.

As to claim 17, Cox teaches being able to sense and intercept based on a user changing user data. (Col. 6, lines 28 – 32 of Cox)

As to claims 18 and 19, see the rejection of claims 1 – 5, 9 – 13, and 17. Note that because interception and monitoring a call or signal involves replicating the call or any service, any change to-be implemented by a user changing his/her data could be monitored since such a change would be reflected in signals that would effect that change in the system. See also Col. 8, lines 47 – 58 of Cox.

Also, if a change is detected, it is inherent that information would be sent along with the user information because all the information sent and received by the system elements, as discussed above, are tagged with or already include user information. Therefore, some type of user data change message is sent.

And again, if signals can be monitored and a signal represents a change in user information, the changes performed could be monitored and sent to the monitoring agency/personnel.

As to claim 20, see the rejection of claims 6 and 18.

As to claim 21, see the rejection of claims 18 and 19.

As to claim 27, see the rejection of claims 1, 12, 16, and 17.

As to claim 28, see the rejection of claim 13.

As to claims 29 and 30, see the rejection of claims 14 and 15.

As to claims 31 and 32, see the rejection of claims 18 and 19.

As to claim 33, see the rejection of claim 20.

As to claim 34, see the rejection of claim 21.

Conclusion

5.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 5,923,744 (Cheng) teaches intercepting call communications within an intelligent network. US 6,078,648 (Albers et al.) teaches advanced intelligent network functionality for electronic surveillance. US 6,504,907 (Farris et al.) teaches call detail reporting for lawful surveillance. US 6,665,376 (Brown) teaches selectively activated integrated real-time recording of telephone conversations with automated documentations of consent to call recording. US 2003/0108182 (Dikmen) teaches a method and apparatus for intercept of wireline communications.

6.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hector A. Agdeppa whose telephone number is 703-305-1844. The examiner can normally be reached on Mon thru Fri 9:30am - 6:00pm.
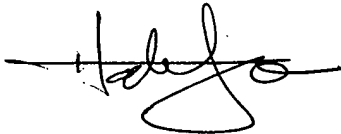
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad F. Matar can be reached on 703-305-4731. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

H.A.A.
July 7, 2004

HECTOR A. AGDEPPA
PATENT EXAMINER